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FRANKFORT KY 40601

July 27, 1998

Mr. Fritz Wagener
Water Quality Standards Section
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street
Atlanta, Georgia 30303

Dear Mr. Wagener,

As requested by Region 4, the Kentucky Division of Water seeks to clarify language in Kentucky Water Quality Standards Regulations 401 KAR 5:030 (5)(a)(1) regarding effluent limits for new and expanded sanitary discharges into high quality waters. The regulation sets minimum limits but does not indicate when more stringent limits will be applied or the manner in which limits will be derived.

Unless a demonstration is made of the socio-economic necessity of the facility (as described in 401 KAR 5:029 Section 2), no new *privately*-owned sanitary wastewater treatment plant will be allowed into a high quality water. This decision is based on our 1994 report "Regionalization of Wastewater Treatment in Kentucky: Progress, Problems, & Recommendations" that described the problems with privately owned package plants in Kentucky and nationwide. The decision is consistent with 401 KAR 5:035 Section 3 regarding treatment requirements and compliance. (Readers Note: This reg refers to the policy of the commonwealth to protect water quality, and it has been used for denying new facilities on several occasions. Although subject to challenge, we have been successful using :035 in the past.)

Expansion of existing privately owned sanitary wastewater treatment plants in high quality waters will be allowed provided effluent limits are reduced to a level that does not increase pollutant loading or maintains existing water quality (as demonstrated by modeling). Phosphorus removal also will be required for expanded private facilities. It should be emphasized that the operational history of facilities requesting an expansion is closely scrutinized. Facilities in non-compliance are not allowed expansions unless problems with overloading or outdated facilities are resolved by the expansion.

For new and expanded publicly owned sanitary wastewater treatment plants, the limits in the regulation for CBOD5 (10 mg/l) and ammonia nitrogen (2/5 mg/l summer/winter) will apply if the WLA model predicts that DO does not fall below 6 mg/l during 7Q10 low flow conditions. This provides added protection for high quality waters compared to use protected waters (other than waters classified as Coldwater Aquatic Habitat), where DO must remain at least 5 mg/l. The DO permit limit in the regulation (7.0 mg/l) will not change. It will probably be necessary to add the 6.0 mg/l instream DO requirement to the nondegradation regulation. The regulation also states that phosphorus will have a maximum limit of 1.0 mg/L. The actual limit will be determined by stream and discharge flows, drainage area (which generally relates to flow characteristics), and background concentrations to protect the receiving and downstream waters from the effects of increased nutrient input. Other parameters (TSS, fecal coliform bacteria, TRC) will be limited as in the regulation.

We hope that this clarifies the Division of Water's position on the more stringent requirements that will be required for sanitary wastewater dischargers to high quality waters. We look forward to resolving the issue and moving on to Region 4's other concerns with the nondegradation regulation in the upcoming triennial review.

Sincerely,

Jack A. Wilson, Director
Division of Water